

1    CLAIMS:

2            1.        A method of imaging a lithographic printing plate having a heat sensitive  
3    coating, comprising the steps of:

4                    (a)        imagewise applying droplets of a near infrared absorbing imaging  
5                    material to the plate coating;

6                    (b)        exposing the plate to near infrared emitters; and

7                    (c)        developing the coating.

8            2.        The process of claim 1 further comprising the step of:

9                    (d)        washing the developed plate.

10           3.        The method of claim 2 further comprising the step of:

11                    (e)        drying the washed plate.

12           4.        The method of claim 1 wherein the near infrared absorbing imaging material  
13    absorbs in the 2.2-3.2 micron range.

14           5.        The method of claim 1 wherein the near infrared absorbing imaging material  
15    absorbs in the 3.2-3.3 micron range.

16           6.        The method of claim 1 wherein the near infrared absorbing imaging material  
17    absorbs in the 3.33-3.55 micron range.

18           7.        The method of claim 1 wherein the near infrared absorbing imaging material  
19    absorbs in the 5.7-6.1 micron range.

20           8.        The process of claim 1 wherein said coating comprises a photo-crosslinkable  
21    polymeric and polyazide binder.

22           9.        The process of claim 1 wherein said coating comprises a resole and novolac  
23    resin with a latent bronsted acid.

1           10.     The process of claim 1 wherein said coating comprises a heat setting monomer  
2     and binder resins.

3           11.     The process of claim 1 wherein said coating comprises a monomer with a heat  
4     activated polymerization initiator.

5           12.     The process of claim 1 wherein said coating comprises a novolac resin with a  
6     naphthoquinone diazide sulfonic acid ester.

7           13.     The process of claim 1 wherein said coating comprises a diazo resin.

8           14.     The process of claim 1 wherein said coating comprises ablative materials.

9           15.     The method of claim 1 wherein the near infrared absorbing imaging material  
10    comprises a dye.

11          16.     The method of claim 15 wherein the dye is selected from the group consisting  
12    of a squarylium dye, croconate dye, phthalocyanine, a merocyanine dye, indolizine, pyrlium,  
13    dithiolene, a metal complex, carbon black, and phthalocyanine.

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